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Abhandlung

Robert Leighton*

Cassibile revisited: rock-cut monuments and the configuration of Late Bronze Age and Iron Age sites in southeast Sicily

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Zusammenfassung: Die prähistorische Nekropole von Cassibile im Südosten der Insel Sizilien gilt als bedeutender regionaler Fundort für die späte Bronze- und Eisenzeit Italiens (ca. 1300 bis 700 v. Chr.). Die Region wird allgemein als ein wichtiges Bevölkerungszentrum und Sitz einer Herrschaft angesehen, die noch vor der griechischen Kolonisation im 8. Jh. v. Chr. einen prägenden Einfluss auf umfangreiche Gebiete ausübte. Bekannt ist der Fundplatz vor allem aufgrund der in den Jahren 1898 und 1927 von Paolo Orsi durchgeführten Ausgrabungen und der weit mehr als 1000 in den Fels gehauene Grabkammern, die sich über eine Fläche von etwa 6 km² verteilen. Die Vielfalt und Lage der archäologischen Überreste in Cassibile ist nur unzureichend dokumentiert und noch weniger verstanden. Der Autor liefert neue Informationen über den Fundort auf Basis von Beobachtungen vor Ort und überdenkt die Bedeutung des Platzes in Bezug auf: a) die in den sichtbaren Felsen gehauenen Monumente sowie die von Orsi übernommenen Daten; b) die Platzgröße, Entwicklung und Demografie und c) die Lage der Gräber und Behausungen in Bezug auf die lokale Topografie und den landschaftlichen Kontext. Der hier vorgestellte Ansatz zielt darauf ab, sowohl die Organisation und Konfiguration vergleichbarer Fundplätze dieser Periode wie auch das hier erkennbare Verhältnis zwischen Kultur- und Naturlandschaft zu beleuchten. Der Artikel schließt mit einer Diskussion zur Siedlungsstruktur und einer von Herrschaft und Macht geprägten Landschaft (“landscape of power”) in der Region zwischen der späten Bronzezeit und den Anfängen der griechischen Kolonisation.

Schlüsselworte: Sizilien; Cassibile; Pantalica; Finocchito; späte Bronzezeit; Eisenzeit; Kammergräber; Grabarchitektur

Résumé: La nécropole protohistorique de Cassibile dans le sud-est de la Sicile est un site d'importance régionale pour l'âge du Bronze final et l'âge du Fer (entre environ 1300 et 700 av. J.-C.). On l'interprète comme un centre de population majeur ou comme centre d'une chefferie qui s'étendait sur un territoire considérable pendant les siècles qui précédèrent la colonisation grecque du VIII^e siècle av. J.-C. Le site est surtout connu pour les fouilles que Paolo Orsi y a conduites entre 1898 et 1927: il contient bien plus de 1000 tombes creusées dans la roche et couvre une surface d'environ 6 km². La diversité et la situation des vestiges archéologiques de Cassibile sont cependant mal documentées et mal étudiées. L'auteur présente de nouvelles informations sur la base d'observations sur le terrain et réexamine l'importance du site par rapport: a) aux tombes encore visibles et aux données héritées de Paolo Orsi; b) à la taille du site, son évolution et sa démographie; c) à l'emplacement des tombes et des habitats par rapport à la topographie locale et la place qu'il occupe dans le paysage. Il espère ainsi mettre en évidence l'organisation et la configuration de sites de cette période ainsi que les rapports entre les paysages naturels et culturels. En fin d'article on trouvera une étude sur les habitats et l'occupation du territoire, ainsi que sur l'avènement d'un « paysage du pouvoir » dans la région, un phénomène qui se développa au cours de l'âge du Bronze final et des débuts de la colonisation grecque et dans lequel les tombes taillées dans la roche vive jouèrent un rôle important.

Mots-clés: Sicile; Cassibile; Pantalica; Finocchito; âge du Bronze final; âge du Fer; chambres funéraires; architecture funéraire

Abstract: The prehistoric necropolis of Cassibile in south-east Sicily is one of the defining regional sites of the Italian Late Bronze and Iron Ages (circa 1300–700 BC). It is generally regarded as a major centre of population or chiefdom that dominated a substantial territory in the centuries prior to Greek colonisation in the 8th century BC. Known

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mainly from excavations undertaken in 1898 and 1927 by Paolo Orsi, it comprises well over 1000 rock-cut chamber tombs spread over an area of about 6 km². The variety and location of archaeological remains at Cassibile, however, is little documented and poorly understood. The author provides new information about the site based on observations in the field and reconsiders its significance with reference to: a) the currently visible rock-cut monuments and Orsi's "legacy data"; b) site size, development and demography; c) the location of the tombs and dwellings with respect to local topography and landscape context. This approach aims to illuminate the organisation and configuration of sites of this period as well as the relationship between the cultural and natural landscape. The article concludes with a discussion of settlement patterns and an evolving "landscape of power" in the surrounding region between the Late Bronze Age and the beginnings of Greek colonisation, in which rock-cut tombs featured prominently.

Keywords: Sicily; Cassibile; Pantalica; Finocchito; Late Bronze Age; Iron Age; chamber tombs; funerary architecture.

Introduction: time and place

Of the many archaeological sites in southern Sicily that were first investigated in the late 19th century by Paolo Orsi (b. 1859, d. 1935), the prehistoric necropolis of Cassibile is one of the most striking due to the large number, distribution and location of its rock-cut chamber tombs, which are mostly dated between the Late Bronze Age and the Early Iron Age (henceforth LBA and EIA). In the traditional chronological framework of Sicilian prehistory, the site lends its name to the "Cassibile" or Pantalica II period (about 1000–850 BC), which is preceded by the LBA Pantalica I or "Pantalica North" period (about 1250–1000 BC), and followed by the EIA Pantalica III or "Pantalica South" period (about 850–730 BC)¹. The Pantalica IV or "Finocchito" period (about 730 to 650 BC) is contemporary with the first phase of Greek colonisation in eastern Sicily².

Named after the river and the nearby modern town, Cassibile is known primarily for numerous groups of

tombs that extend for about three kilometres North-South and two kilometres East-West over the slopes of several limestone hills at the edge of the Hyblaean plateau beside the coastal plain (Figs. 1–2). These hills provide commanding coastal views to the island's southernmost tip and north to Syracuse and beyond. Locally called *cugni*, they are mainly elongated promontories, demarcated by deep gorges and canyons (*cave*), including the Cava Grande, Sicily's "Grand Canyon", through which the river Cassibile flows.

Archaeological sites in the surrounding territory include Neolithic villages and a network of Middle Bronze Age communities (most notably at Thapsos, Syracuse and Cozzo Pantano) in the coastal zone, which became a focal point of Greek colonisation and Syracusan expansion in the 8th–7th centuries BC. The Cassibile river is identified with the Kakyparis mentioned by Thucydides in connection with the floundering Athenian expedition in 413 BC and with the Wadi Qassibari in the 12th-century *Book of Roger* by the Arab geographer Al-Idrisi³.

Orsi's data and new observations

Published information about Cassibile derives almost entirely from Orsi's campaigns of 1897 and 1923, and a study by Turco of his notebooks and finds held in the Syracuse museum⁴. Orsi's excavations evidently focussed on two easily accessible areas, which he called Serra Palazzo and Cugno Spineta. While the Serra Palazzo tombs are readily identifiable south of the river (Fig. 4), the location of his Cugno Spineta tombs requires clarification (below). The rough and steep terrain, however, evidently discouraged him from investigating tombs elsewhere on the site⁵.

Orsi estimated that there were around 2000 rock-cut tombs in total, although this figure is disputed below⁶. Nevertheless, we only have information concerning a small proportion of them, probably around 10–15 %, and can only date around 5–10 % from grave goods. He examined about 247 tombs, of which about 106 contained material datable to the Cassibile (Pantalica II) period, as defined by characteristic artefacts: notably the elbow or "Cassibile fibula", the thickened arch fibula and the pedestal plate (Fig. 3)⁷. One or two finds can be assigned to the earlier Pantalica I period, however, and seven tombs

¹ Bernabò Brea 1957, 154. More recently: Leighton 1999, 200–203; Turco 2000; Albanese Procelli 2003, 58–60.

² In Italian (mainland) terminology, the LBA includes the Recent and Final Bronze Ages, spanning the 13th–9th centuries BC, so that the Cassibile period coincides with the Final Bronze Age 3 (BF3) – Early Iron Age 1 (IFE1): Albanese Procelli 2005, 522.

³ Thucydides VII. 80. 5; Idrisi 2004, 70.

⁴ Orsi 1899b; 1928; Bernabò Brea 1987; Turco 1990; 2000.

⁵ Orsi 1928, 75.

⁶ Orsi 1899b, 118.

⁷ Turco 2000, 21–55.

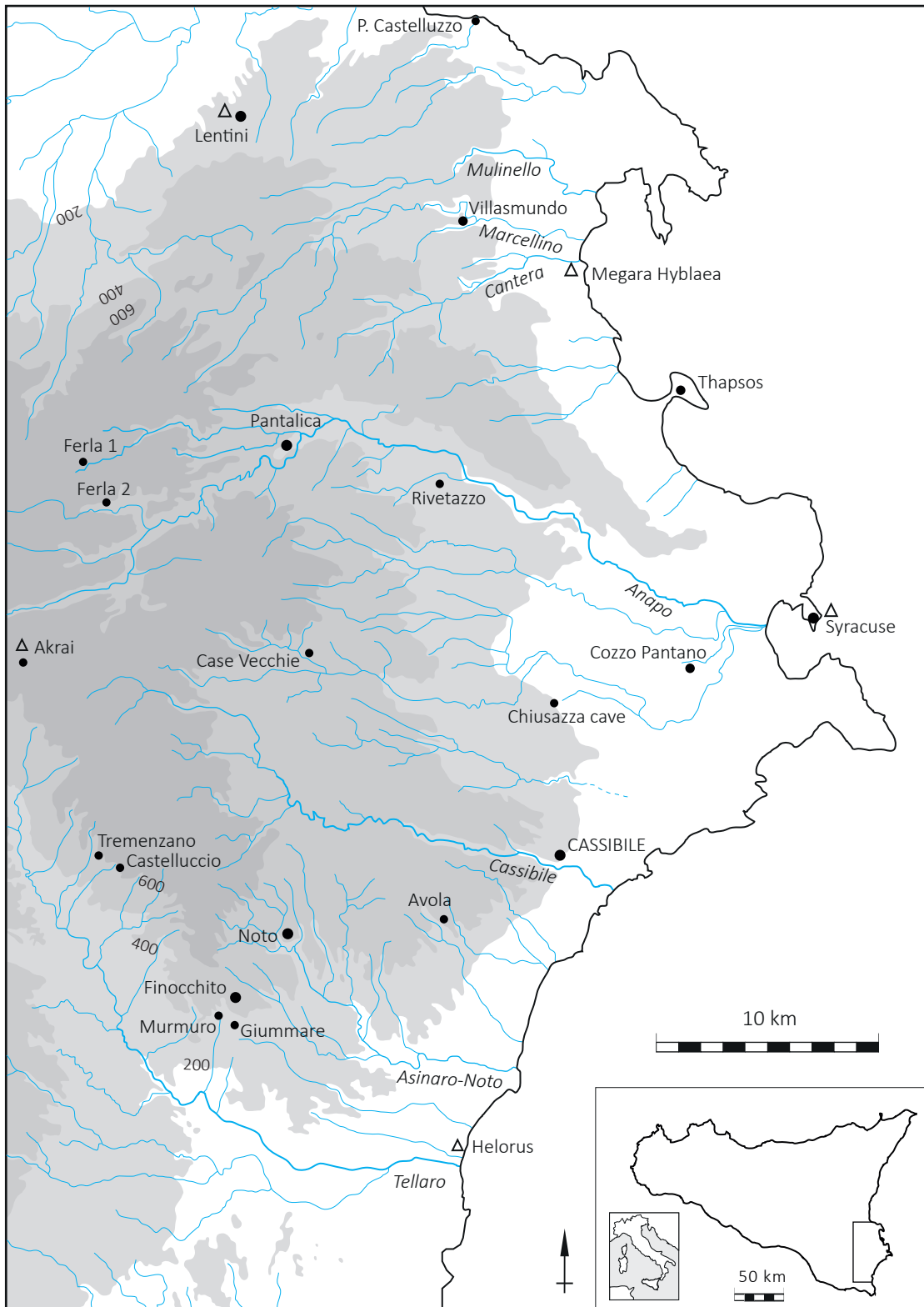


Fig. 1: Cassibile and sites of the late 2nd and early 1st millennium BC in southeast Sicily (scaled dots indicate larger and smaller sites; triangles are Greek settlements)

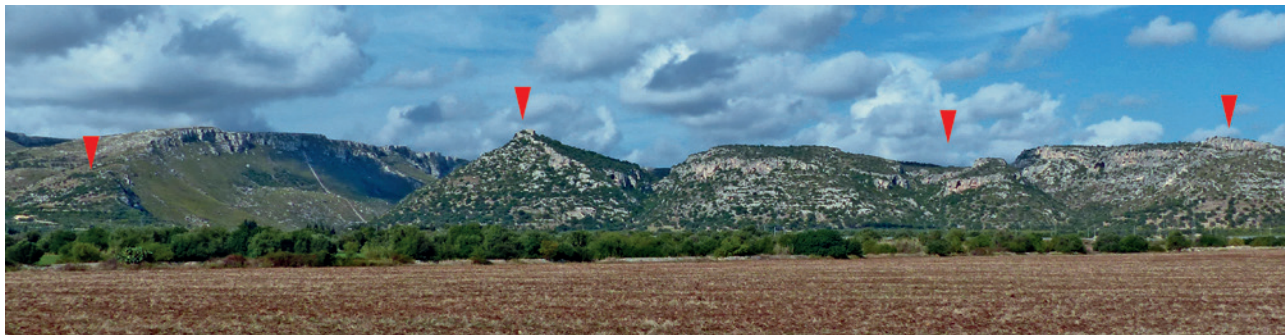


Fig. 2: The Cassibile hills from the East (arrows indicating, left to right: Serra Palazzo, Cugno Mola, Cugno Nave, Cugno Spineta)

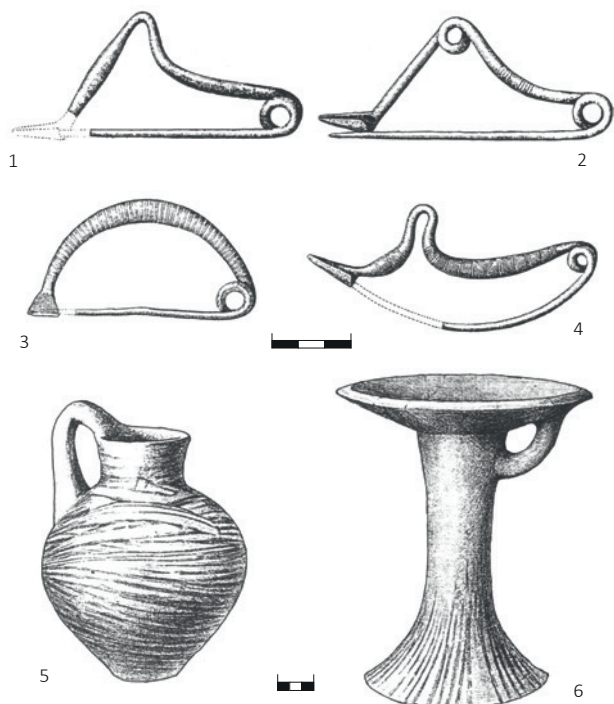


Fig. 3: Typical LBA-EIA artefacts from the Cassibile tombs: 1–2 “elbow” fibulae; 3 arched fibula; 4 serpentine fibula; 5 jug with plumed (*piumata*) painted decoration; 6 pedestal plate (after Orsi 1899b, tav.XIII–XIV)

dated to the later Pantalica III period, while some pottery recovered in the 1970s indicates that the site was still occupied around the time of Greek colonisation⁸. In sum, while the great majority of Orsi’s finds belong to the Pantalica II period, the necropolis was evidently in use for much longer, probably from at least 1100–700 BC. In addition, one or two objects implied occasional re-use of prehistoric tombs for burials in later antiquity. There are also plenti-

ful surface finds, as noted below, attesting occupation in Archaic, classical, Hellenistic and Medieval periods.

One aim of this article is to shed light on the distribution of rock-cut monuments at Cassibile, where the absence of a site plan has made the configuration of the site particularly hard to understand. By plotting the location of tomb groups on maps or satellite images from direct observation, sometimes with the help of GPS readings, it has been possible to show the outlines of the main groupings at a low resolution, which is a necessary starting point for a discussion of their spatial distribution and relationships to such aspects of the landscape as relief, water sources, access routes and vegetation. Macro-scale observations have also prompted consideration of site definition, organisation and demography. This approach is designed to illuminate the general layout and development of Cassibile and to compare it with other sites of about the same period in the surrounding region.

While a few measured drawings are presented here as exemplars of the variety of monuments and finds encountered at Cassibile, the vast majority of individual rock-cut features as well as the numerous natural rock-shelters and caves in their vicinity remains undocumented. Although it was possible to reach many tombs and observe their form, in some cases visibility was hindered by partial vegetation and soil cover. A systematic intensive survey of Cassibile, therefore, has yet to be undertaken; it would require direct intervention and clearance, but would undoubtedly uncover a great deal of additional information⁹.

⁸ Ibid. 97–98; Procelli 1978, 575–576.

⁹ As, for example, at the large LBA necropolis of Dessucri: Nicoletti 2012.

Funerary architecture and practices

Since funerary practices in this part of Sicily are a complex subject, already discussed by various authors¹⁰, I will comment here only on the form and size of the Cassibile tombs and some general issues concerning their significance and interpretation. Most of Orsi's tombs (about 87 % at Cugno Spineta) were rectilinear (roughly rectangular or trapezoidal) and the rest curvilinear (roughly D-shaped or oval) in form. The grave goods from the rectilinear chambers belong to the LBA-EIA (Pantalica II–III periods). Although curvilinear tombs seem to be more characteristic of the LBA than the EIA in southeast Sicily, as seen at Pantalica¹¹, this is not demonstrable at Cassibile where, for example, the finds from curvilinear tombs CS27 and CS60 are similar to those in the rectilinear tombs¹². Caution is due, however, since Cassibile period artefacts have sometimes been found in older Bronze Age tombs in southeast Sicily, which were evidently reused, for example at Lentini (Cugno Carrube) and Cozzo Pantano¹³.

Orsi's records suggest that the floor area of the rectilinear tombs ranged from approximately 0.60m² (tomb SP81) to 4.49m² (tomb CS3c'), while the majority (about 66 %) were between about 1.5m² and 2.8m². The 24 tombs for which Orsi provides measurements as well as some skeletal information appeared to contain 13 single skeletons, 8 doubles and 3 triples, a total of 38 individuals, giving an average of 1.58 individuals per tomb. Although the skeletal records are mainly just skull counts by Orsi and of uncertain reliability (below), there seems to be only a weak correlation between tomb size and the number of occupants insofar as the larger tombs (1.79m² and above) each contained an average of 1.69 individuals, whereas the smaller tombs (1.79m² and below) contained an average of 1.5.

Social identities, which can have many facets, are not easily inferred from the Cassibile chamber tombs, by contrast with some other contemporary sites, such as Madonna del Piano where, however, jar burials were the norm¹⁴. While some looting of the Cassibile tombs and lack of detail in Orsi's records hinders interpretation, the restricted range of tomb goods, notably bronze fibulae and

pedestal plates (Fig. 3), suggests limited divergence from certain norms. Items of evident value or distinction, such as weapons or precious metals, are almost entirely absent. It is possible, nevertheless, that larger tombs, those with more elaborate entrances, those placed on more prominent rocky outcrops or set apart from others, reflect persons of different, or higher, social standing¹⁵. In the absence of skeletal remains, which were not recovered, the identification of sex or age differences is virtually impossible, although one might assume that the double and triple inhumations were related individuals.

Despite the limitations of archaeological evidence, we can hardly doubt that large cemeteries of rock-cut tombs, such as Cassibile, were places of great significance, not least because of the time and effort that went into creating them, the large areas of terrain that they occupied, their visibility, durability and close identification with the history and ancestry of the living community, and with religious or spiritual matters more generally¹⁶. Ethnographic evidence for the association between rock-cut tombs and elaborate funerary rites is also thought-provoking, even if not readily transferable to Sicilian prehistory. For example, chamber tombs of similar appearance to those of Cassibile can be seen on the island of Sulawesi (Indonesia), where, for Toraja society, death was followed by a whole series of elaborately choreographed rituals, feasts and processions, essential to social life and order, that involved entire communities and could take months, or even years, to conclude¹⁷. We cannot easily reconstruct such activities from archaeological remains, although it is interesting to note that some of the grave goods in Sicilian LBA-EIA rock-cut tombs could well allude to eating and drinking and have sometimes been interpreted in terms of a funerary banquet¹⁸. The Sulawesi tombs were collective family-based tombs and carefully positioned with reference to the settlement and surrounding territory, where they were a powerful presence and point of reference in on-going communications between the living and the dead. It is interesting to note that the carving out of a Sulawesi tomb could take a year or more to complete and was carried out by experienced workmen who were paid for the service¹⁹.

Prior to the wider discussion of site organisation, development, topography, demography, landscape setting and regional settlement patterns, the next four sections

¹⁰ E. g. Albanese Procelli 2003, 56–61; Turco 2000, 101–107 (for Cassibile).

¹¹ Leighton 2015, 193.

¹² Contemporaneity at Cassibile is also implied in some cases (e. g. tomb CS49–51) where curvilinear and rectilinear chambers share a dromos (corridor) (Turco 2000, 28; 33; 62 Fig. 15, 99).

¹³ Frasca 1982; Orsi 1893, Tav. I,8.

¹⁴ Albanese 2003, 69–75. Here too, however, the valuable skeletal evidence is missing.

¹⁵ For example: Orsi 1899b, 139 Fig. 52; Turco 2000, 104.

¹⁶ E. g. Leighton 2015, 201.

¹⁷ E. g. Koubi 1982.

¹⁸ E. g. Mansicalco 1985–1986.

¹⁹ E. g. Waterson 1995, 207.

of this article provide a brief description and analysis of easily observable archaeological remains (tombs, houses, surface finds and more recent monuments) on the site, based on direct observations.

Tomb distribution and form

The approximate location and extent of the main Cassibile tomb groups, which include one or two individual tombs, are indicated with grey shading on Fig. 4 and numbered from 1–32. The precise number of tombs in each group is often difficult to specify due to problems of accessibility and visibility created by slope erosion and vegetation. The figures offered here are counts of readily visible tombs only and are therefore probably less than the original numbers, which are further discussed below²⁰.

When approached from the north, the first significant tomb group appears on the southern corner of Cugno Spineta (Fig. 4,2)²¹. Despite vegetation and hill wash on these moderate slopes, at least 11 tombs are clearly visible, which are mostly rectilinear chambers with flattish ceilings, small neatly cut entrances near ground level and a short dromos (corridor) sloping down from the tomb door, presumably in order to drain water away from the chamber (Fig. 5,1). These are typical of Cassibile and identifiable as LBA-EIA types.

A short distance from the main group, however, is an isolated tomb of different form, cut into the vertical face of a rocky outcrop beside a flat terrace or platform (Fig. 5,2). The door is framed by a quadrangular carved panel (Fig. 6), while the curvilinear chamber has a large niche at one side. These features have more in common with Early Bronze Age (henceforth EBA) than LBA-EIA rock-cut tombs in this part of Sicily, for example at Castelluccio²²,

and suggest the existence of an otherwise unknown EBA period of occupation at the site (see also below).

Just across the stream valley (Cava Uono) on the opposite (northeastern) corner of Cugno Nave is a small but prominent group of tombs on the vertical face of a distinctive rocky outcrop (Fig. 4,3). Groups 2 and 3 are clearly inter-visible and could be said to mark the entrance to the Cava Uono, like sentinels flanking a gateway.

Groups 4 and 5 are larger and more conspicuous, comprising at least 264 tombs, overlooking the coastal plain between the Cava Fontanelle and Cava Sant'Anna (Fig. 4,4,5). They are mainly on the lower slopes of the southernmost lobe of the Cugno Nave, where they occupy the fairly steep, sometimes vertical, faces of longish horizontal outcrops (Fig. 8)²³. Group 6 is a smaller adjacent cluster of at least 10 tombs. It can hardly be doubted that groups 4–5 were the main ones excavated by Orsi, even though he referred to them as Cugno Spineta tombs. In modern nomenclature, Cugno Spineta is further north, between Cugno Nave and Croce (Fig. 4)²⁴.

Most of these tombs are of rectilinear form, albeit with slightly curved walls and, where the slope is gentler, a short dromos (Fig. 7). A minority are curvilinear, however, including semi-elliptical or D-shaped forms, or show signs of alteration (e. g. Fig. 5,4,6). Groups 4–6 are mostly easily accessible, their stepped rocky outcrops often flanked by level or gently sloping ground creating pathways through the burial zone. Those tombs which rise up in tiers for several metres could be more easily reached with a ladder from below, or ropes from above (Fig. 9). The density of the tombs also varies from concentrations, with the typical “honeycomb” effect, to fairly scattered tombs 10 m or more apart. On rock faces where tombs are more

strengthen the hypothesis of EBA occupation, although these artefacts are long-lived, see Orsi 1899b, 138.

²³ Old photographs of this area from Orsi's time (in the Syracuse Museum) and one published in 1896 (Von Duhn/Nöhring 1896, Taf. 89), show at least 104 tombs in part of group 4.

²⁴ Orsi's different terminology transpires from a sketch reproduced by Turco, who calls this hill Cugno Carbone, although this name does not appear on any map (Turco 2000, 15 Fig. 3, 20; 11). Bernabò Brea (1987, 45–53) and Turco (1990, 69) have placed Orsi's tombs on the modern Cugno Spineta, where there are very few tombs, instead of between Cava Fontanelle and Cava Sant'Anna, where they almost certainly lie. Cugno Nave could be the hill that Orsi (1899b, 117) sometimes calls Cugno Zagaria. Groups 4–5 on my plan also correspond with tombs in old photographs (Orsi 1899b, Tav. XII) and with those labelled, erroneously, by Turco (1990, 71 Fig. 3; 2000, 13 Fig. 1) as Cugno Spineta tombs. The maps on which my plans (Figs. 4; 12; 16) are based are: Istituto Geografico Militare, Foglio 277 IV, N. E. Cassibile, 1: 25, 000 (4th edition, 1968); Regione Siciliana, Carta Tecnica Regionale, 649020 (Cugni di Cassaro), 649030 (Cassibile), 1: 10, 000 (2008 edition).

²⁰ Numbers of tombs counted for the various groups shown on Fig. 2 (1–32) are as follows: group 1 = 1; group 2 = 11; group 3 = 7; group 4 = 44; group 5 = 220; group 6 = 10; group 7 = 2; group 8 = 7; group 9 = 25; group 10 = 173; group 11 = 3; group 12 = 75; group 13 = 3; group 14 = 2; group 15 = 63; group 16 = 100; group 17 = 27; group 18 = 6; group 19 = 5; group 20 = 13; group 21 = 1; group 22 = 17; group 23 = 43; group 24 = 132; group 25 = 9; group 26 = 48; group 27 = 1; group 28 = 2; groups 29–31 = 95 (according to Orsi); group 32 = 17. Total = 1162.

²¹ I have not seen prehistoric tombs on the Cugno Croce or the northern side of Cugno Spineta. Although this area is indicated as a burial zone by Turco (2000, 15 Fig. 3), it requires further investigation. However, one tomb on the edge of Cugno Croce (see Fig. 2,1) appears to be a late antique chamber tomb, or possibly a re-used prehistoric tomb with a trench grave, rectangular in plan and trapezoidal in section, cut into the floor. Assessment of this chamber was impeded by its current use for storage of agricultural equipment.

²² Orsi 1892a. For ground stone axes from Cugno Mola, which could

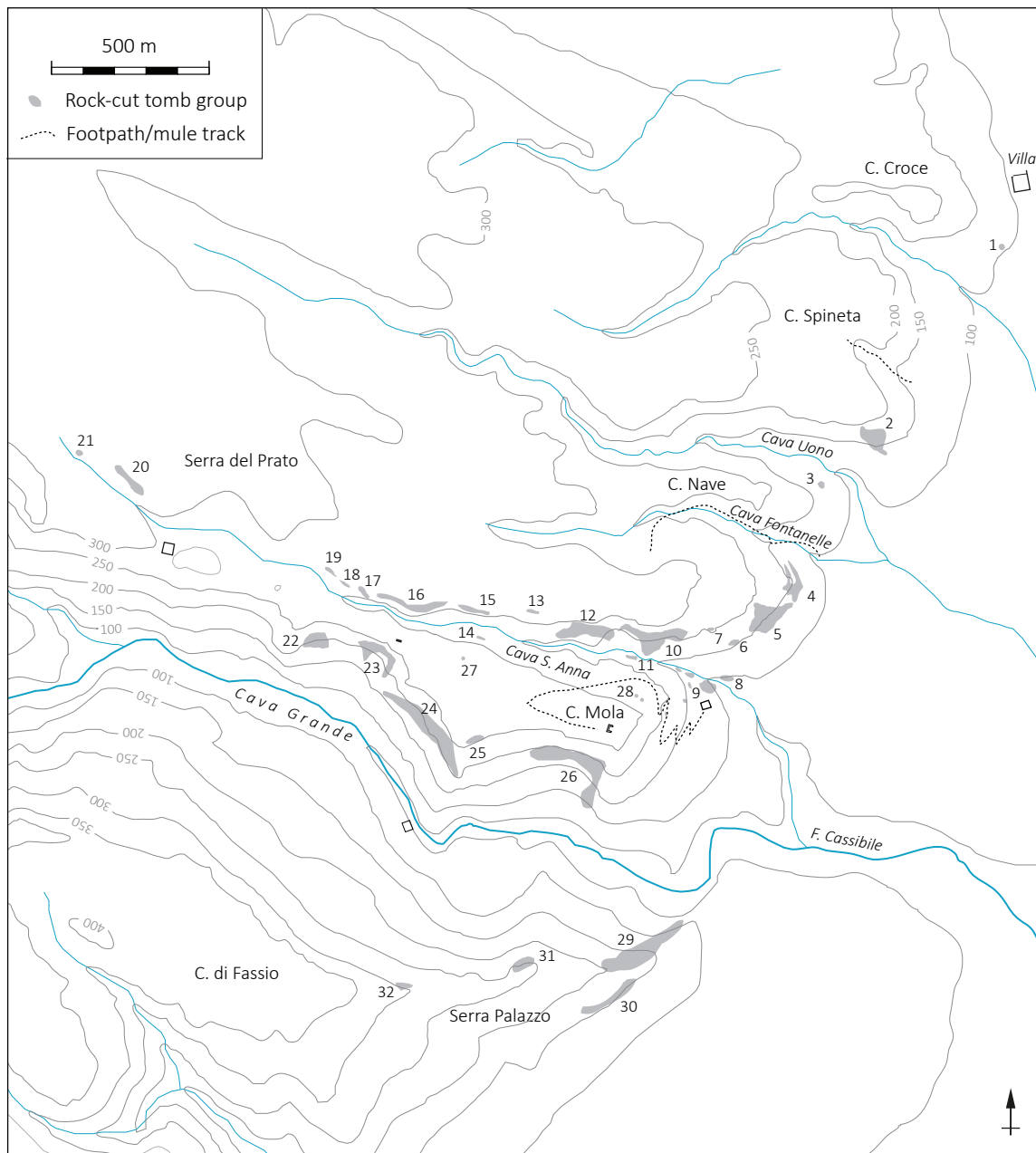


Fig. 4: Distribution of prehistoric burial zones with rock-cut tombs (shaded and numbered) at Cassibile (C. = Cugno)

densely clustered we can sometimes see shallow rock-cuttings, which resemble preparatory or unfinished work (Fig. 9). Possibly one could reserve a plot on the rock face, as in a flat cemetery.

At least 15 groups of tombs extend for over 2 km along the Cava Sant'Anna, mostly on its northern side (Fig. 4, 7–21). Initially a shallow stream valley near Serra del Prato, this canyon deepens rapidly, delimiting the northern flank of Cugno Mola, from where the tombs are most easily viewed (Fig. 10). There are at least 505 tombs in

groups 7–21. The westernmost groups tend to be smaller in number, culminating in an outlying group and a tomb overlooking the start of the stream bed (Fig. 4, 20–21). Some variability in tomb shape was noted as well as the occasional presence of unfinished chambers or niches cut in the rock (Fig. 5, a, b, g). Group 19 includes a large open rock-cut shelter with a bench at one side and a rubble wall evidently added as an enclosure (Fig. 5, 7). This composite feature is difficult to date; although the built wall looks recent, the rock-cut chamber or vestibule could be

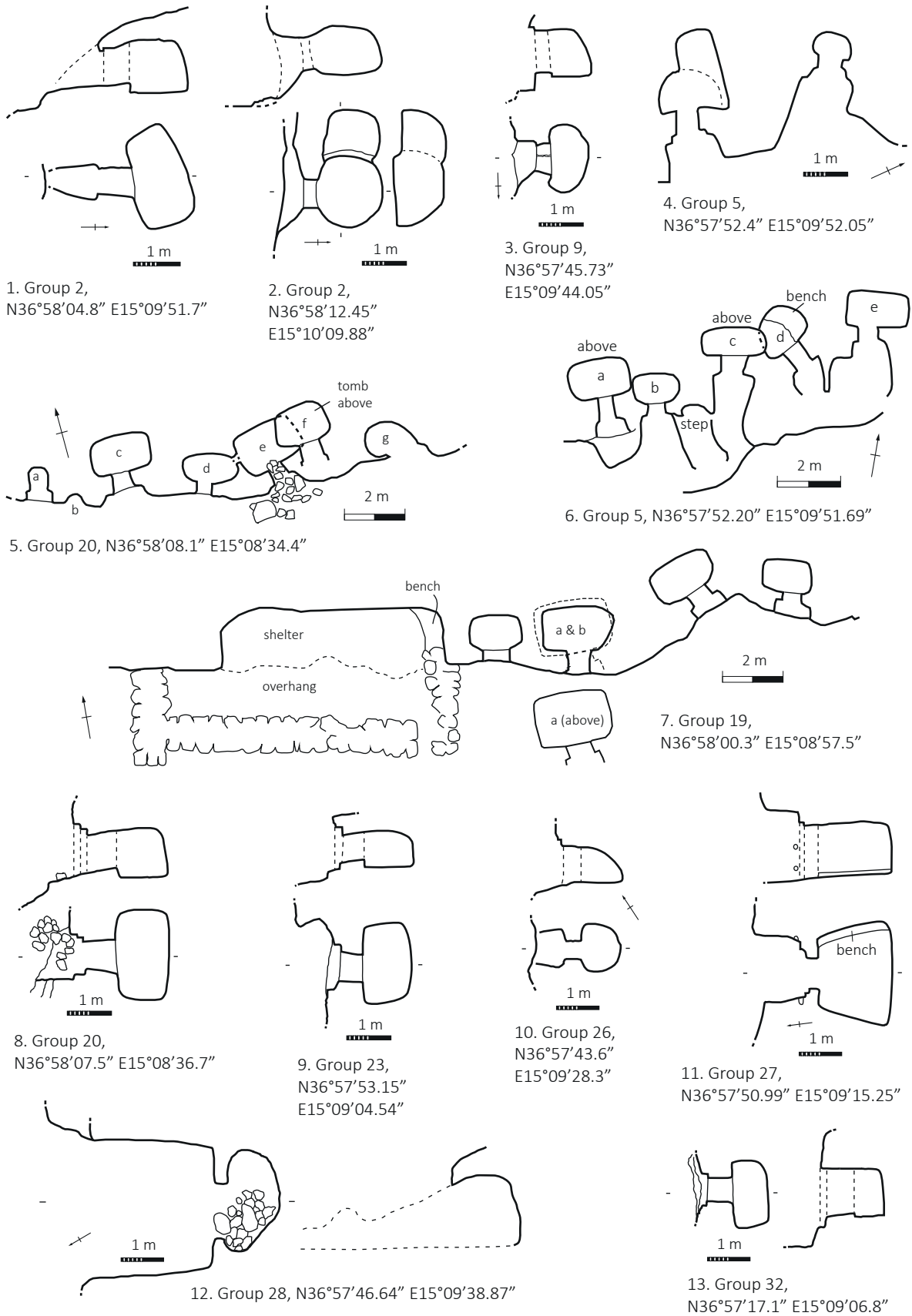


Fig. 5: Examples of prehistoric tombs from various groups



Fig. 6: Prehistoric tomb entrance in group 2



Fig. 7: Tomb with dromos in group 4



Fig. 8: Groups 4–5 on the southern lobe of Cugno Nave



Fig. 9: Tombs in group 5

contemporary with the tombs²⁵. Group 20 includes an example distinguished by a sizeable well-cut doorway, somewhat detached from the main group, perhaps indicating special status (Fig. 5,8).

On the southern side of the Cava Sant'Anna, groups 8 and 9 comprise several small clusters close to a series of large habitation chambers and settlement material described below. Although the majority of these tombs are rectilinear, there are also one or two curvilinear forms (Fig. 5,3).

On the rough steep southern slopes of Cugno Mola, which chute down to the river 250 m below, groups 22–23 comprise mainly small clusters of rectilinear forms (Figs. 4,22–23; 5,9), while groups 24–26 extend around rocky corries with spectacular views over the Cava Grande (Fig. 11). It is hard to see more than about 200 tombs in

all, but the terrain may be hiding more. Group 26 appears thinly spread over a wide area of the higher slopes. Some of the tombs in the least accessible and precipitous locations are of rather small dimensions and include both rectilinear and curvilinear or semi-elliptical forms (Fig. 5,10). This part of the site shows how tombs are often in places unsuitable for habitation.

Very few tombs are observable on the summit of Cugno Mola. Two isolated chambers here differ from those recorded so far. Number 27 has a trapezoidal plan with a low bench and sockets for a cross bar in the dromos (Figs. 4,27; 5,11). This form is well documented at the site of Finocchito, where it is associated with depositions of the “Finocchito” or Pantalica IV period, which is contemporary with the early phase of Greek colonisation in the late 8th–early 7th centuries BC²⁶. Tomb 28 is an unusual chamber with a wide entrance, perhaps enlarged sub-

²⁵ Open rock-cut spaces are occasionally documented beside LBA tombs (e. g. Frasca 1982, 29 [tomb 21]).

²⁶ Steures 1980.



Fig. 10: Part of group 16 (Cava Sant'Anna) from the South

sequently, preceded by a large rock-cut forecourt (Figs. 4,28; 5,12). This design is reminiscent of the forecourt tombs of the EBA (Castelluccio culture) as represented, for example, at Santa Febronia²⁷. While uncertainty about its date persists in the absence of associated finds, it may be another indication, like the tomb in group 2 (above), of an earlier period of occupation.

South of the river, groups 29–31 are identifiable with those of Orsi's second campaign on the slopes of Serra Palazzo, where he investigated 95 tombs, which were mainly rectilinear and datable to the same period as his Cugno Spineta tombs²⁸. While group 31 is further into the Cava, group 32 is much higher up on the Cugni di Fassio near the 300 m contour with a fine view of the Cava

Grande (Fig. 4,29–32). This group is also easily accessible and largely consistent in form with those elsewhere on the site. One or two chambers with large doorways (e. g. Fig. 5,13) are more prominently placed on the steep rock faces by comparison with those on gentler slopes beneath them.

Altogether, therefore, it is possible to identify at least 32 tomb groups of different size and density at Cassibile, comprising at least 1162 individual tombs, spread over a wide area. Their topographical context and associations are further discussed below, following a short account of other monument types and surface materials.

Rock-cut dwellings

Apart from tombs, the most conspicuous archaeological features at Cassibile are large non-funerary rock-cut chambers, which can justifiably be regarded as dwellings,

²⁷ Maniscalco 1996.

²⁸ Orsi 1928; Turco 2000, 45–55. Since accessibility and visibility was difficult for groups 29–31, I will simply accept Orsi's count of 95 tombs for them.



Fig. 11: Cugno Mola's tree-lined southern summit from the Cava Grande (Cugni di Fassio), with Syracuse harbour top left

although other uses for them cannot be excluded. Such monuments are widespread in the limestone countryside of southeast Sicily, although they have been little studied and present various challenges to research²⁹. Orsi habitually referred to them as *cameroni bizantini* or *abitazioni trogloditiche*³⁰, although he hardly mentions those at Cassibile. The date of these monuments is generally hard to establish. They sometimes show signs of use or re-utilisation in Medieval or more recent times. I suggested recently that at least some at Pantalica, which present several analogies with those of Cassibile, could be pre-Byzantine in origin and possibly even date from the same period as the prehistoric rock-cut tombs³¹.

They form two main groups on the Cugno Mola, where their distribution is essentially complementary to that of the tombs, despite some overlap in group 1 on the north-eastern slope (Fig. 12)³². Group 1 comprises at least

26 chambers spread over 2–3 hectares, generally spaced several metres or more apart on moderate and occasionally steep slopes. There are various rather eroded rock-cut features in their vicinity, such as paths, steps, narrow channels probably for water collection or drainage, and some circular grooves suggesting the base of a press. Group 2 comprises at least 42 easily accessible chambers spread across the north-facing slopes of Cugno Mola, enjoying good views over the Cava Sant'Anna and beyond, although there may be many more on these slopes, which have been altered by terracing. They occupy at least 8 hectares, mainly flanking the cart track (*trazzera*) that traverses the hill in a roughly ENE direction around the 270–80 m contour line.

The chambers vary greatly in size and plan. Single rooms are normally 20–30m² (Fig. 13,B.C.F), although some of the largest are about 50m² and units comprising two or more adjoining rooms can reach 80m² (Fig.

²⁹ E. g. Messina 2010.

³⁰ Orsi 1898, 17–21.

³¹ Leighton 2011, 462.

³² Orsi (1899b, 119) also mentions a *villaggio bizantino* south of the Cassibile river, perhaps that known to Burgaretta (1992, 74) as Carru-

vazza. Agglomerations of rock-cut chambers in precipitous locations also occur further up the Cava Grande, including the so-called Grotta Cuzziria or dei Briganti (e. g. Messina 2010, 16 Fig. 2).

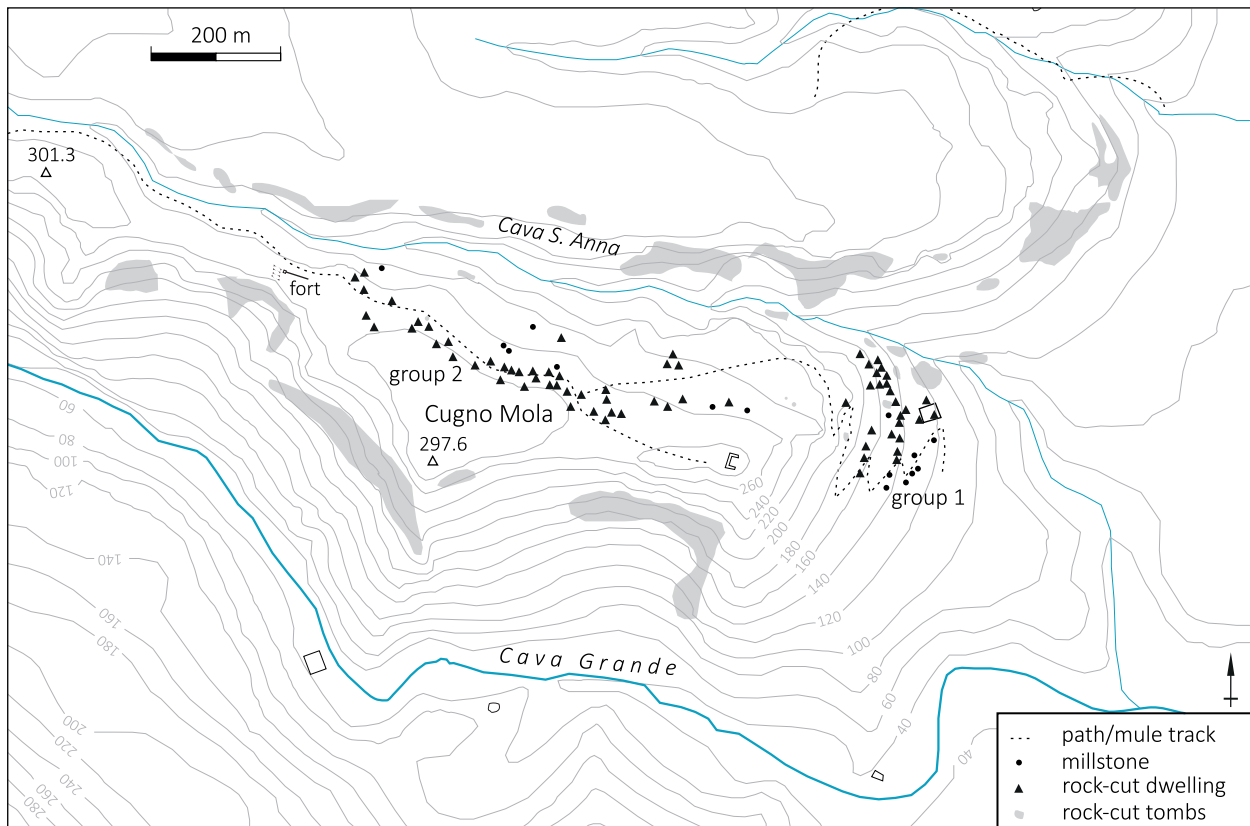


Fig. 12: Location of features on Cugno Mola

13,A,D). The plan is often rectilinear, but sometimes lobed or curved. In most cases a rectangular doorway, which is the only light source, extends from the ceiling to the floor, but a few have a wide open entrance all along one side. Another recurrent feature is a pair of curved or semi-circular niches cut out of the rock on either side of the entrance exterior (Fig. 13,A, B,D,E, 'a' and 'b'). Some of these have a domed section, reminiscent of a bread oven (Fig. 13,A), although there is no sign of burning. They are very likely connected with water collection, since the rock surface above some chambers has channels that are clearly designed to direct water to either side of the entrance. Internally, towards the rear of the chamber, a small platform of bedrock sometimes occurs on the floor, about 10 to 30cm high, perhaps intended to combat damp (Fig. 13,B, D,E). It is usually just large enough to have been a sleeping platform, although it might equally have been for storage. Other common features are wall niches of variable size, as well as small "cup handles" or rope-holes for tethering animals or hanging items.

The general absence of tombs in the vicinity of these chambers does not support the idea that they were originally tombs subsequently converted into dwellings, at

least not in the great majority of cases³³. It cannot be excluded that their makers sometimes took advantage of natural cavities; there are also one or two natural caverns in the vicinity of group 1. Some chambers have signs of subsequent additions or extensions, which might be related to changes in function over time. For example, some masonry benches or stretches of stone wall look fairly recent (e. g. Fig. 13,D) as also, quite obviously, the detritus from contemporary agricultural usage as cow byres or animal shelters. The occasional presence of an incised cross on the walls, seen at Cassibile in at least two chambers, also suggests a Medieval date and could reflect a desire to re-claim or Christianize an older monument in a place with mysterious origins or undesirable associations (e. g. Fig. 13,E). The unusually large rectilinear chambers (Fig. 13,A,D) might have had public or religious, rather than purely domestic, functions. Possible parallels for these are rock-cut rooms of broadly Hellenistic date at Noto Antica and in the Cava d'Ispica, sometimes regarded

³³ There is an exception to this, however, in group 1, where a tomb seems to have been incorporated into a larger chamber.

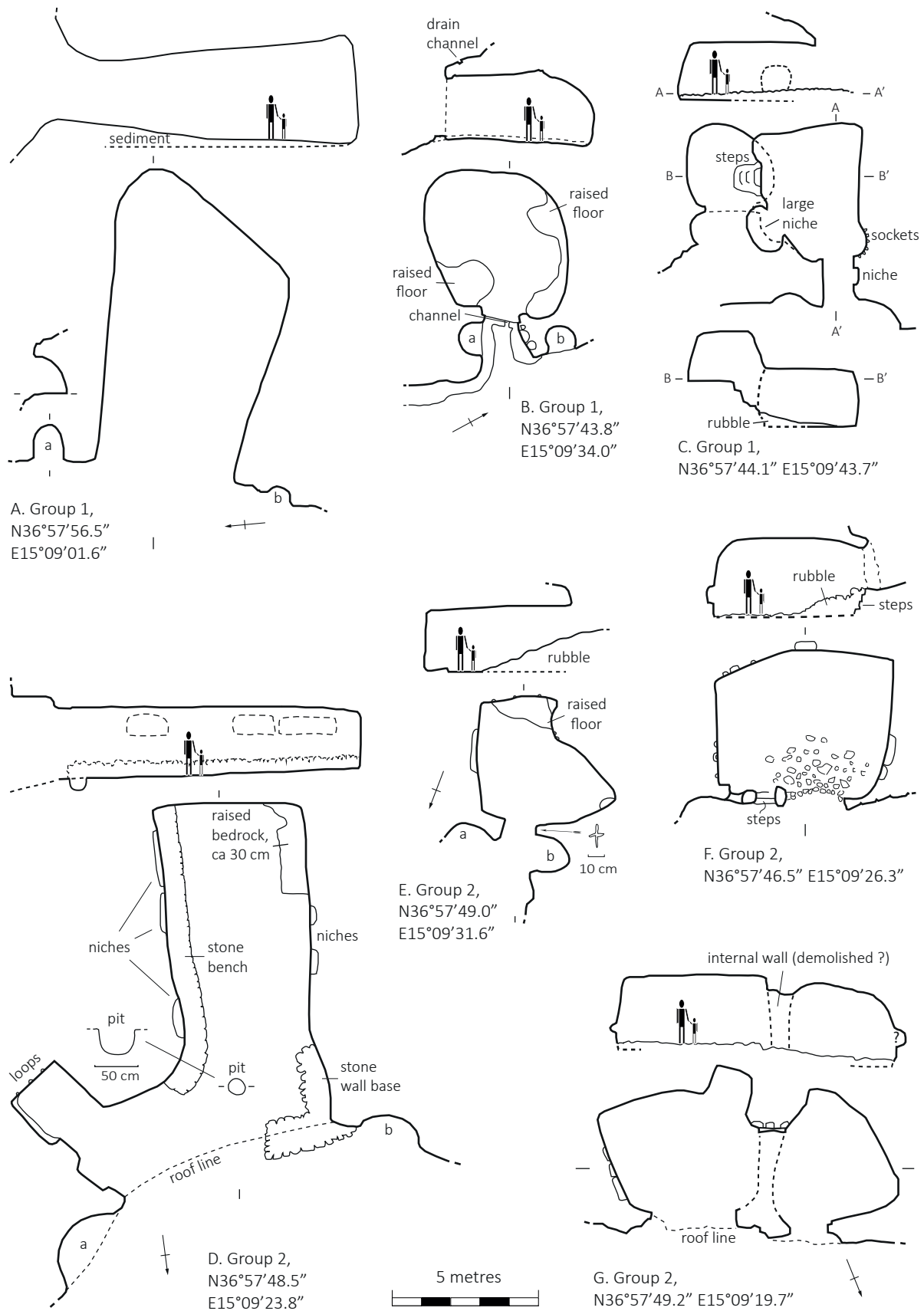


Fig. 13: Rock-cut dwelling chambers on Cugno Mola

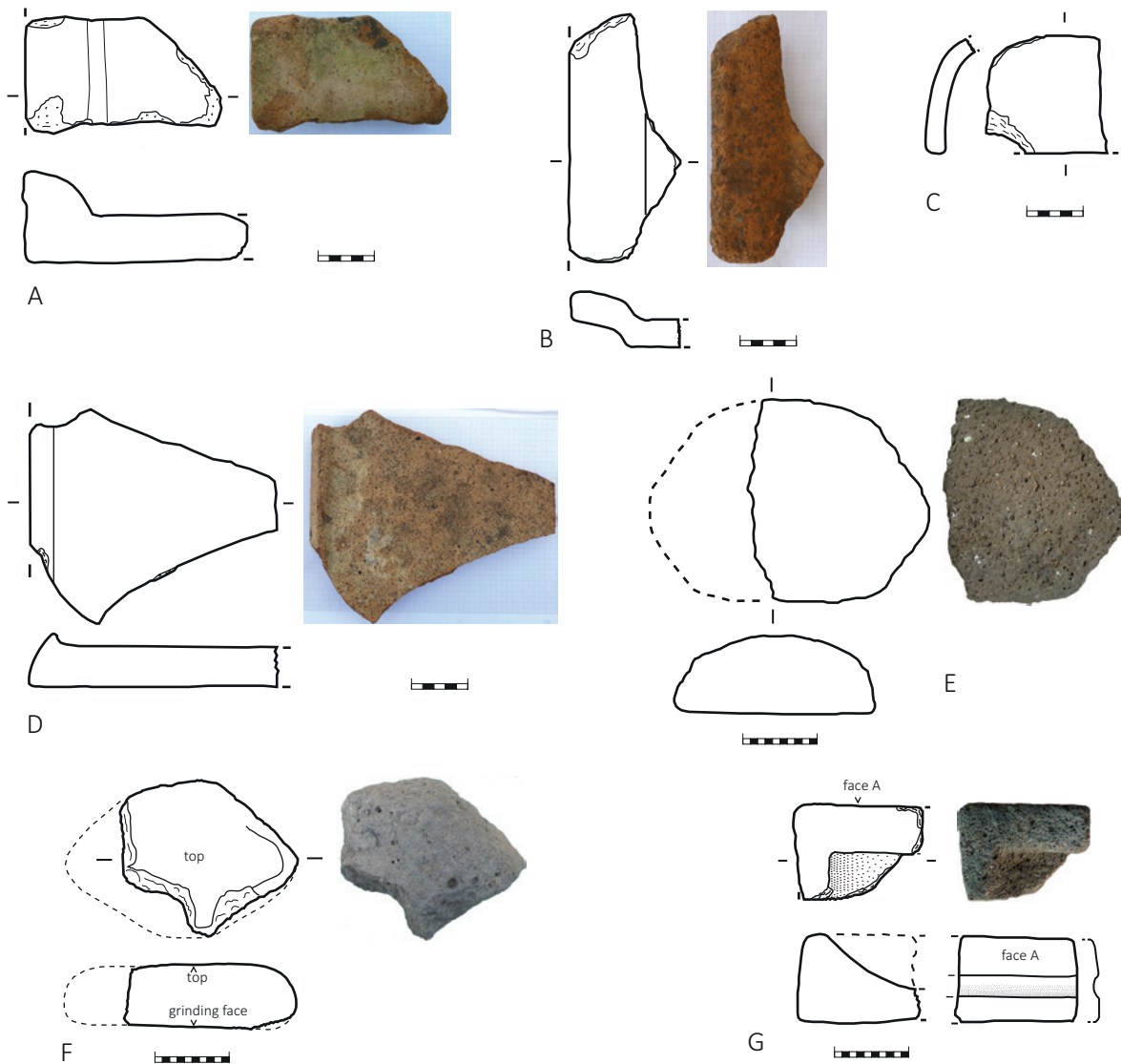


Fig. 14: Roof tiles and millstones, Cugno Mola

as shrines or *gymnasia*³⁴. Medieval rock-cut chapels carved out of older chambers are also common in this region, as seen, for example, at Pantalica³⁵. While many of the Cassibile chambers appear to have been cleaned out, others might present opportunities for excavation from internal soil deposits or by test-trenching around the entrances. Until this is undertaken, their dating will remain uncertain. In the next section, however, some chronological indications of activity in their vicinity from surface finds are described.

Surface finds

Fragments of ancient roof tiles and lava millstones are conspicuous in certain areas of Cugno Mola, suggesting the persistence of settlement and agricultural activity at the site into the later 1st millennium BC³⁶. A few observations about them must suffice here in the absence of a systematic survey. One concentration is visible over an area of about 2 hectares adjacent to the rock-cut habitations of

³⁴ E. g. La Rosa 1971.

³⁵ Leighton 2011, 460.

³⁶ By contrast I have not seen these materials on Cugno Croce, Spineta or Nave. One wonders whether the name of the hill relates to their presence (*mola* being Latin for millstone); or whether, for example, the Italian word *mole*, in the sense of a large rock, is more relevant. For various mills (*mulini*) of recent date along the Cava Grande, see Burgaretta 1992, 55–67.

group 1, while more widely scattered materials occur on the top of Cugno Mola and its northern slopes, also broadly coincident with the group 1 rock-cut habitations (Fig. 12). Most of the tile fragments are well-fired with a creamy pale orange or yellow-green surface, and orange fabric containing abundant volcanic grog (Fig. 14,A–D). The raised curved border is typical of the Archaic period (roughly 6th–5th centuries BC) in Sicily (Fig. 14,A)³⁷. Fragments with chaff temper, which are more consistent with Medieval and relatively recent tiles, seem to be rarer at Cassibile. The millstones (Fig. 14,E–G) also conform to at least three well-known types: a) the oval plano-convex saddle quern, which is typical of later prehistory, but probably also continues into the early colonial period; b) the similar but usually narrower form with roughly shaped hand-grips, which is more characteristic of Archaic and slightly later contexts (6th–5th centuries BC); c) the distinctive quadrangular “hopper-rubber” quern, which is generally dated to the Hellenistic period (4th–2nd centuries BC)³⁸.

In the vicinity of group 1 habitations can also be seen occasional fragments of roughly contemporary pottery, such as black-glazed ware, or an even rarer and much later piece of green-glazed ware. Although none of this material necessarily dates the rock-cut habitations, its proximity cannot be ignored and is enough to warrant a hypothesis, albeit requiring further investigation, that the rock-cut chambers date back at least to the Archaic period. This need not generate undue surprise since rock-cut habitations of classical antiquity are known in eastern Sicily, for example at Lentini, where one house combined rock-cut and built chambers, partly covered with Archaic roof tiles³⁹.

Other historical monuments

The most conspicuous monument on the summit of Cugno Mola is the ruined villa at its eastern end, partly built in the 1950s but never completed. Traces of an older structure may have been found during building⁴⁰. Nearly 800 m away towards the opposite end of the hilltop are the remains of a fortification (Fig. 12: fort), which is probably the Medieval castle of Cassibile known from historical documents of the 14th century and later⁴¹. It con-

sists of a stretch of masonry wall, about 40 m long, and a small quadrangular chamber, with mortared masonry and patches of wall plaster, resembling the base of a tower (Fig. 15). The latter is located on the edge of a rock-cut ditch, 8–10 m wide, which evidently served to create a barrier across the top of the hill at a naturally narrow, but otherwise weak, point, thereby controlling access to Cugno Mola from the west⁴². While the ditch could date from the same period as the fort, one cannot exclude an earlier origin. One possible analogy for such a juxtaposition is at Pantalica, where the similarly vulnerable western approach to the site (Filiporto) was fortified with a ditch at its narrowest point and a nearby tower⁴³. At Pantalica, however, the ditch most likely dates to classical antiquity (possibly the 4th-century BC), while the tower was almost certainly a Medieval addition. A similar chronological relationship at Cugno Mola is merely hypothetical, but since we have evidence of occupation in classical antiquity, the creation of a ditch at this time would be comprehensible and reflect an appreciation of the defensive potential and topography of the site in different periods.

Site size and demography

Despite the problem of hidden and unrecorded tombs, the distribution of the known groups permits some observations and hypotheses about site organization, size and demography. We have seen that the tombs are widely scattered but not evenly spread, becoming more numerous around Cugno Mola. Major groups also occur on the eastern side of Cugno Nave and Serra Palazzo (Fig. 4,4–5.29–31), while those on Cugni di Fassio, Serra del Prato and Cugno Spineta are smaller and more outlying.

In the absence of information about the prehistoric residential zones, the tombs can provide a basis for an assessment of site size, although there is no entirely objective way to measure this. Much depends on how one defines a site and its boundaries. For example, while the shaded areas representing tombs on the plan amount to roughly 22 hectares, the figure would rise dramatically to about 180 hectares if the terrain around the tombs were included for up to about 100m² (a hectare), thereby comprising 11 hectares of Serra del Prato, 33 of Serra Palazzo and 136 of Cugno Mola, Nave and Spineta (Fig. 16). If we also include more of the flatter land suitable for residential or related purposes on the top of Cugno Nave, Spineta,

³⁷ I thank Carla Antonaccio for advice on the typology of Sicilian roof tiles.

³⁸ White 1963.

³⁹ Spigo 1986.

⁴⁰ Burgaretta 1992, 26–27; 98.

⁴¹ Orsi 1899b, 119; Burgaretta 1992, 97–98.

⁴² Turco 1990, 75 Fig. 9.

⁴³ Orsi 1899a, 85–86 Fig. 33.

and Mola, and regard the site as a single rather sprawling entity, we would need to add at least another 70 hectares to the total, giving an overall figure of around 250 hectares, which still excludes a much wider site catchment of exploited or managed land in the surrounding area. While this reveals little about the number of inhabitants, it underlines the considerable maximum extension of Cassibile, which is comparable only with major contemporary centres of the Italian LBA-EIA, such as Pantalica in Sicily (roughly 170 hectares)⁴⁴ and the large ‘proto-urban’ Villanovan sites of central Italy, which can range up to 200 hectares in extent⁴⁵. On the other hand, if we ignore all the burial zones and consider only the flatter terrain and gentler slopes of Cugno Mola, the maximum habitable surface area of this single central promontory is no more than about 21 hectares (by comparison with about 66 hectares in the case of the main promontory at Pantalica).

Consideration of tomb numbers and distribution inevitably raises difficult questions about demography. While we have ascertained a minimum of 1162 tombs, the original number must have been higher, but the extent of loss or invisibility (mainly due to slope erosion) varies across the site and cannot be calculated precisely. In most areas, however, it does not seem so severe as to warrant increasing the count by more than about 20–30 %. For example, a 30 % addition (347 tombs) would give an estimated total of 1509 tombs. While this is still a rather subjective figure, it leads one to suspect that Orsi’s estimate of 2000 tombs is a little too high.

Orsi’s observations of human bones at Cassibile suggest an average of about 1.48 individuals per tomb, which gives a total of 2233 people (1509 tombs \times 1.48 individuals), whom we could assign to an estimated 400 years of occupation (roughly 1100–700 BC). If we assume an average lifespan of 31.1 years, suggested by recent work at Polizzello⁴⁶, equalling 12.86 generations (400 \div 31.1), we obtain a rather small average population figure of just 174 people (2233 \div 12.86). Plainly, this assumes that everyone was buried in a chamber tomb and that tombs were not emptied and re-used. The number of individuals per tomb recorded by Orsi is probably too low, however, due to the poorer preservation of children’s bones, and the limited interest in human remains, which were rarely recovered, in Orsi’s time. For example, the more recent excavation of Sicilian Iron Age rock-cut tombs at Polizzello found high percentages (over 50 %) of infants and children⁴⁷. More-

over, since most of the finds at Cassibile date to a fairly restricted time period of approximately two centuries (1000–800 BC) it is likely that the maximum population of the site dates only to that time. The population in this main period of occupation, therefore, might plausibly have been two or three times the estimate of 174; that is between about 348 and 522 people, if not more.

Another approach to population size could utilize the habitation chambers. Since they are of uncertain date, however, we can only consider them as potential demographic indicators for an unspecified pre-modern period. It is also possible that there were more of them than is currently apparent and that there were also built houses on the site. Adding 30 % to the 68 recorded examples would give a total of 88. If we were to associate each one with a family of four or five, we would have a population of 352–440 people (4–5 \times 85).

While such calculations are plainly tentative, they caution against high population estimates, despite the huge surface area of the site and its cemeteries. Few other LBA sites with rock-cut tombs in Sicily can easily claim to have been larger. One is Caltagirone, with an estimated population of around 630 in its LBA phase (about 1250–1050 BC), and another is Pantalica, where the ratios are more problematic, although a population of up to about 1000 seems credible to this writer, even if it requires adopting various multipliers⁴⁸. Following careful evaluation of more sites, it would be worth reassessing some of the rather high population estimates in the literature for later Sicilian prehistoric sites⁴⁹.

It is noteworthy that, according to anthropological models of fissive and corporate community demography, promoted by several archaeologists in recent years, most notably John Bintliff, the larger Sicilian LBA/EIA sites with over 200–300 individuals would no longer qualify or have functioned efficiently as tight-knit ‘face-to-face’ communities⁵⁰. They would either subdivide themselves into looser multiple groupings in proximal neighbourhoods, with some degree of inter-independence, in order to preserve their more ‘egalitarian’ characteristics; or else have developed more hierarchical internal social divisions, headed by an elite. The scattered distributions of burial zones at Cassibile and Pantalica are both consistent

⁴⁴ Leighton 2015, 447.

⁴⁵ Pacciarelli 2000, 178.

⁴⁶ Messina *et al.* 2008, 57.

⁴⁷ *Ibid.* 57–59.

⁴⁸ Tanasi 2008, 165 (Caltagirone). Leighton 2015, 201 (Pantalica). For a discussion according to site surface area, see Leighton 2012, 192.

⁴⁹ Battaglia/Alliata (1991, 26) suggested a population of 1058 at Cassibile, based largely on Orsi’s higher estimate of 2000 tombs and occupation lasting just 150 years.

⁵⁰ E. g. Bintliff 2012, 54–55. For similar considerations in relation to the LBA/IA of central Italy, see Fulminante 2014.

with the former theory, although the prominence of Cugno Mola at Cassibile suggests that any such neighbourhoods were not of equal status. Pantalica has more evidence than Cassibile for internal social differences, as represented by uneven levels of wealth in its tombs, which may imply that it was also characterised by greater ‘vertical’ ranking and centralised management.

Chamber tombs and the creation of place

Of the major LBA-EIA sites in the island, Cassibile most fully encompasses the diversity of the southern Sicilian landscape, so that the site is almost a microcosm of the wider regional geography, presenting a multitude of contrasting viewpoints and habitats. From the rock-cut tombs of Cugno Mola, one can walk within 30 minutes across the open coastal plain to the seashore, into deeply enclosed river valleys, or onto windswept hilltop plateaux and heathlands, all of which are within eyeshot if not earshot.

Although there is no direct evidence of the prehistoric residential area from unambiguous structural remains, it is often thought to have comprised more than one unit⁵¹. For example, the main burial zones might have had an associated settlement nucleus nearby, which would mean that separate groups of people resided on all the Cassibile hills. That their dwellings were on the summits of these hills, however, cannot be taken for granted. We have seen that rock-cut houses of group 1, albeit of uncertain date, are on the gentler lower slopes of Cugno Mola, which is a less well-defended location, but a more sheltered one with easier access to water and the cultivable soils of the coastal plain (Fig. 12)⁵². Surface finds betraying residential activities, such as millstones of various periods, have been noted both here and near the summit of the same hill. Without excluding the hypothesis of multiple residential nuclei, therefore, one may still infer that the bulk of the community resided on the Cugno Mola, which is the highest of the Cassibile hills north of the river (297 m asl), the only one surrounded by tombs, and the best defended by nature thanks to its extensive steep slopes (Fig. 11). It stands out as a central or focal point of the site, or citadel, which could serve outlying inhabitants as well.

Why were tombs placed in so many different groups and locations over such a wide area? One possibility,

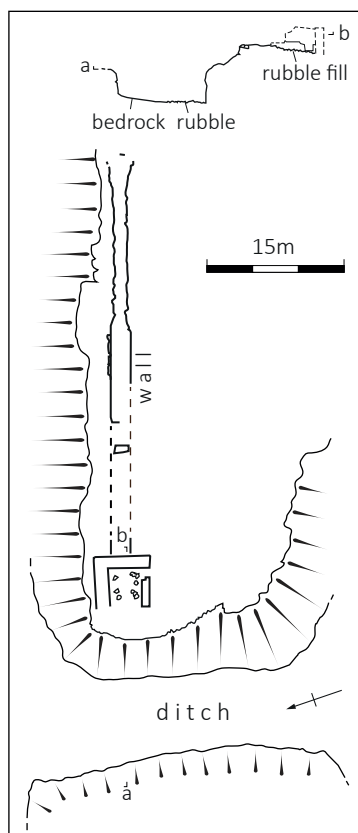


Fig. 15: Fort and ditch, Cugno Mola

noted above, is that it reflects the distribution, or fission, of residential zones, which results from demographic growth. Orsi thought that the tomb-makers avoided places where the rock was too soft and crumbly⁵³, which may also be true, although it does not explain much as there is no shortage of suitable rock over the site. Intentionality is often elusive or multi-faceted in matters concerning burial monuments, although kinship is a typical concern; a recurrent function, especially in semi-urban or urban contexts, is to communicate affiliation or ancestral connections and to create sacred or ritual zones buttressing residential ones, thereby strengthening a sense of place, belonging and continuity.

In this case, the tombs could represent a unifying thread in a highly differentiated and extensive tract of land that a modern observer would probably not have envisaged, *a priori*, as forming a single ‘site’; they might be thought of as the stitching holding nature’s patchwork together, while creating a new pattern of their own. Central to the pattern was the distinctive promontory of Cugno Mola, which was surrounded by burial grounds, but also linked to adjacent valleys and headlands by more tombs. If defined by the latter, the boundaries of the site

⁵¹ Orsi 1899b, 119; Turco 2000, 100.

⁵² Likewise, LBA houses at other sites, such as Morgantina, are on slopes below the hilltops: Leighton 2012.

⁵³ Orsi 1899b, 120.

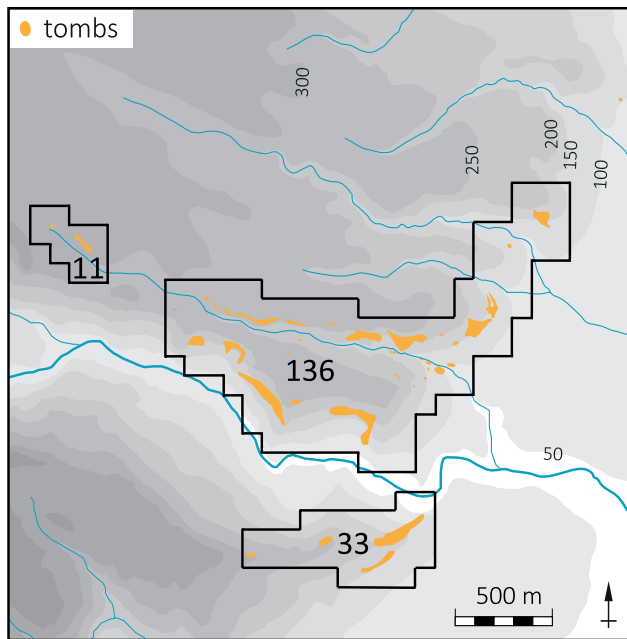


Fig. 16: Cassibile site plan showing hectares (180 total)

did not simply follow nature by hugging natural contours or obvious alignments and topographical units, but extended in a more ambitious way over ample additional terrain. Locating tombs in a variety of specific places could well have had ritual or symbolic functions, which are hard to infer, but also practical purposes, such as incorporating or establishing a claim over essential water sources, notably the Cassibile river, and a wider catchment of land for various agro-pastoral activities: alluvial soils on flat terrain, good for cattle and cultivation, and pasture for sheep and goat on rougher higher ground⁵⁴. Nevertheless, despite the sprawling nature of the site, as defined by tombs, the inter-visibility of adjacent hills and tomb groups, as well as the linkages provided by paths, rivers and promontories, may have helped to maintain a sense of cohesion.

An association between tombs and water is observable, although it could be a result of site morphology and location. While groups 4, 5 and 30 overlook the coastal plain, most tombs flank the river valleys and, in the case of Cava Sant'Anna, are often near the stream bed and start at the same point as the stream valley (Fig. 4, 20–21). Tombs sometimes appear where streams emerge from their valleys onto the coastal plain: groups 2–3, 6–9 and

29 could be marking a transition or even guarding access to the respective Cava. These deeply incised canyons are valued today as rather secretive sheltered locales with unusual riverine fauna and luxuriant flora, in marked contrast to the more scruffy heathlands of the exposed hilltops. Etched into these valleys are ancient, but not readily datable, pathways, so that the tombs may bear reference to the movements of people and water. Other route ways across hilltops and plateaus also seem to have been well used in recent centuries, as shown by various old mule-tracks that effectively bisect Cugno Mola, Nave and Spineta, often negotiating the steeper slopes by zig-zagging back and forth (Fig. 4).

Some general observations about rock-cut tombs of this period also seem applicable here: notably that the scale and monumentality of sites were enhanced by the growing numbers of tombs, which mark space and time for the inhabitants⁵⁵. Unfortunately, we cannot readily chart the development of Cassibile in any detail at present. The tombs represent the cumulative result of a lengthy process of accretion lasting several centuries. The presence of Pantalica I materials at different locations, however, suggests that the wide dispersion of tomb groups was established early on, which may suggest an initial founding by a sizeable group or influx of people⁵⁶. Proximity between tombs with phase II and III materials also implies continuity of location and practice. The allocation of individuals to specific tomb groups might well have been dictated by residential proximity and kinship, which could be relevant, therefore, to the uneven sizes and densities of groups. As noted, they vary from close-knit clusters, reminiscent of apartment windows, to more distanced groups. A rare example of a phase 4 tomb (Fig. 4, 27) was detached from the rest near the top of the hill, perhaps a sign of changing cultural patterns in the Iron Age. Further detailed recording of tombs and consideration of their form could shed more light on the pattern of development.

Regional settlement and territory

In order to situate Cassibile within a regional settlement context, we may consider the distribution of late prehistoric and early historical sites within a roughly 25-km radius, between the Anapo and Tellaro rivers (Fig. 1). This

⁵⁵ Leighton 2015, 201.

⁵⁶ This pattern is also encountered at other contemporary sites, such as Pantalica: Leighton 2011, 457. For Pantalica I materials on Serra Palazzo, Cugno Spineta and Mola: Turco 2000, 97–98; Procelli 1978, 575–576.

⁵⁴ While the river Cassibile is perennial, the Cava Sant'Anna and Cava Uno valleys appear to be meagre seasonal sources today, but may have had greater capacity in the past than the other often shallower and shorter stream valleys of the surrounding area.

provides a preliminary basis for discussing territorial relationships and historical developments on a regional scale, although a detailed study requires further field-work and research. Information for the area is heavily reliant on Orsi's work and on sites with rock-cut tombs, rather than modern field surveys. While it is possible that the largest sites, on the scale of Cassibile, are all known, smaller sites are certainly not. It is noteworthy, however, that while relatively few LBA-EIA sites have been found from surface pottery, even in systematic Sicilian surveys, several authors have inferred the existence of settlement hierarchies at this time, dominated by a few large sites, sometimes likened to chiefdoms, with smaller satellites in their territories⁵⁷. How numerous these smaller sites were has yet to be clarified, but they must be under-represented on distribution maps.

The two largest sites of the LBA and EIA in the area of roughly 900 km² between the Anapo and Tellaro rivers are Pantalica and Cassibile, both of which cover more than 150 hectares, centred on a large promontory delimited by tombs and steep slopes, near a significant river (the Anapo and Cassibile). This template is characteristic of several inland sites in the same region (Fig. 17) and presents some similarities with other large LBA sites elsewhere in Sicily, which have roughly 1000 or more tombs attributable to each of their main phases of occupation. For example, the massive LBA necropolis of Monte Dessucri, like Cassibile, is spread over several adjacent hills, with a focal point including houses on the central hill (Monte Maio), overlooking the Dessucri river⁵⁸. Coastal occupation also favoured large distinctive topographical units of various kinds, such as the Thapsos peninsula (about 105 ha) and the already long-settled locality of Syracuse, where LBA-EIA finds from the island of Ortygia (about 55 ha) as well as the adjacent mainland suggest an important centre, possibly consisting of several affiliated nuclei⁵⁹. Another prominent LBA-EIA hilltop site just outside our area is Lentini, while the later Iron Age site of Villasmundo is on the end of a promontory flanked by deep valleys⁶⁰.

We can ascribe central-place functions associated with craft production, trade, greater connectivity and social complexity to the larger LBA-EIA settlements. They tend to occupy distinctive topographical units of more than 50 hectares and be more than 12 km from each other,

which could reflect the limits of their tolerance of any significant rivals and the extent of their territorial control or zone of influence. In the case of Pantalica, a hierarchical settlement pattern may be suggested with respect to the smaller LBA sites of Rivetazzo (about 100 tombs)⁶¹, Ferla (about 16 tombs)⁶² and Case Vecchie (about 100 tombs)⁶³, which are within a 10-km radius, while Akrai (54 tombs on Pinita)⁶⁴ is slightly further away (Fig. 1). The different numbers of tombs recorded at these sites, which merit further checking, suggest variations of scale and status within a little-known class or typology of 'minor' or secondary settlements, perhaps numbering from about two to several dozen people, although we appear to lack what might be thought of as middle-ranking sites with tombs numbering in the low hundreds, and very small sites that might qualify as rural farmsteads with just one or two families. Nevertheless, while size and distance do not automatically disclose the nature or extent of socio-political relations and interdependency, one may hypothesize that these were subordinates, satellites or affiliates of Pantalica, located towards the edge of its territory. Except for Case Vecchie, they are close to the Anapo river or its tributaries, which may have helped to link them. Syracuse is also potentially connected by the Anapo to Pantalica, about 23 km away.

LBA finds of the Cassibile period in a cave (Grotta Chiusazza) and rock-shelter (Punta Castelluzzo)⁶⁵ probably reflect different activities at sites of a ritual or temporary nature; these may also have been significant places in the territorial periphery or borderlands between major centres, notably of Cassibile, Syracuse and Lentini.

LBA settlements in the vicinity of Cassibile are not so readily identifiable, although Cozzo Pantano has evidence of LBA occupation, albeit much less than for the MBA. Its low plateau rising just above the coastal plain, with plentiful local water sources, doubtless still held attractions at this time. The coastal LBA-EIA sites are also consistent with evidence for persistent long-distance trade after the MBA, most notably in metals, especially within a central-western Mediterranean sphere of interaction. Cassibile was well placed to participate in this. Apart

⁵⁷ Leighton 2005, 277–282 (with further references).

⁵⁸ Nicoletti 2012. For the possible relationship between cemeteries and living areas at Caltagirone, see Tanasi 2008, 165–167.

⁵⁹ Leighton 1999, 147–193 (with references for Syracuse, Cozzo Pantano and Thapsos).

⁶⁰ Frasca 2009 (Lentini); Voza 1978 (Villasmundo).

⁶¹ Orsi 1903.

⁶² Italia 1983 (contrada Calanca), marked as Ferla 1 on my map (Fig. 1). Ferla 2 (Fig. 1) is an unrecorded site (Passi Lanza) overlooking the river southwest of Ferla, which needs further investigation, but with tombs that resemble those of Pantalica. I thank Giuseppe Garro (Centro Studio Ibleo) and Sebastiano Matarazzo for showing these to me in 2015.

⁶³ Cugno 2011.

⁶⁴ Bernabò Brea 1956, 11.

⁶⁵ Tinè 1965 (Chiusazza); Bernabò Brea 1971 (Punta Castelluzzo).

from the great harbour of Syracuse, which is about 15 km away and clearly visible from the summits of the Cassibile hills (Fig. 11), there are various good anchoring places along the nearby coast, such as the Fontane Bianche bay, and perhaps the mouth of the Cassibile river, which is slow-flowing across the coastal plain.

There is more evidence for Iron Age settlements to the south of Cassibile. On the edge of the Hyblaean plateau at Avola Vecchia, several dozen chamber tombs cluster on the steep slopes of the *cavetta* (little valley) between Cozzo Tirone and Castello, and around Ronchetto (Fig. 17)⁶⁶. This was perhaps a smallish Iron Age community with a long history, dating from the MBA. Possibly there was a residential zone on the level summit of Cozzo Tirone or the Castello; the latter is a veritable citadel joined to the main plateau by a narrow rocky ridge, cut by a ditch in a manner reminiscent of Cugno Mola at Cassibile, but on a smaller scale⁶⁷. On its southern slopes are numerous rock-cut dwellings utilised up until recent centuries. The site also presents analogies to Cassibile for the location of tombs on the slopes of hills commanding views of different geographical and ecological zones: the Hyblaean tablelands, the steep escarpment and the adjacent coastal plain.

Two large Iron Age sites in the lands between the Cassibile and Tellaro rivers in the later 9th–7th centuries BC are Noto Antica (Monte Alveria) and Finocchito, which are just over 3 km from each other (Figs. 1; 17)⁶⁸. While Finocchito expanded in the late 8th–early 7th centuries BC, when Noto was possibly shrinking, or even unoccupied, a period of overlap between them is likely around the mid-8th century BC. Their close proximity, however, contrasts with the greater distances between LBA sites noted above, although sites are not always at the epicentre of their territories, and these two were undoubtedly more closely linked with different rivers (the Asinaro and Tellaro). While the Noto promontory (about 120 ha) is larger than that of Finocchito (about 52 ha), its configuration is not dissimilar: a large promontory, surrounded by groups of chamber tombs and deep valleys, with an easy but narrow point of access from the North. Orsi identified four Iron Age burial zones at Noto, including a northern group on the adjacent hill-slope, comprising just over 400 estimated tombs, mostly empty or looted.

Finocchito is known primarily for its better-preserved and more extensive groups of tombs around its prime-

ter, and for a fortification wall, reinforcing the narrow approach to the promontory. Adopting an estimate by Steures of between 1449 and 1991 individuals for a time span of 160 years, and an average life-span of 31.1 (as above), gives a population of between 282 and 387 for Finocchito⁶⁹. This would make Finocchito only slightly smaller than Cassibile, according to our approximations (above), which would be consistent with the smaller physical size of the site.

In the 8th century BC, Finocchito must have been a dominant presence in the life of the nearby, probably very small, communities at Cozzo delle Giummare (about 30 tombs) and Grotta del Murmuro (about 10 tombs). Albanese links them with a growing investment in arboriculture and cereals⁷⁰. We may also hypothesize that agricultural terracing walls, which are a distinctive feature of this hilly region in historical times and an obvious way to combat endemic slope erosion, were constructed during the Bronze Age, although they are notoriously difficult to date⁷¹.

To sum up, the morphology of Iron Age sites in the Tellaro region has a good deal in common with those of the LBA, like Pantalica and Cassibile. The choice of a distinctive hill or promontory, resembling a citadel, only easily accessed through a “bottle-neck”, is recurrent. The tombs were generally placed to emphasize the importance, centrality and security of this focal point, albeit extending beyond it, while coinciding with good viewpoints, rivers and access routes. These sites were well placed to dictate territorial relations within a landscape of unequal power relationships, although this need not imply a state of endemic mutual hostility. For example, the location of Avola, Noto, Finocchito and Tremenzano⁷² between the 400–600 metre contour line around the southeastern edge of the Hyblaean plateau could represent a strategic territorial arrangement for mutual benefit.

It is also noteworthy that some sites (Giummare, Castelluccio⁷³, Villasmundo, possibly Noto and now Cassibile) have evidence of EBA occupation or re-use of EBA tombs, so that certain aspects of the settlement pattern, which probably relate to land-use, may be foreshadowed in the

⁶⁶ Albanese 1978; Albanese Procelli 1998, 65, 69–72 Tav. I–IV.

⁶⁷ Turco 1990, 76 Fig. 7–8.

⁶⁸ Orsi 1897a; La Rosa 1971 (Noto). Orsi 1897b; Steures 1980; Frasca 1981 (Finocchito).

⁶⁹ The figures, although from research by Steures, are reported by Tanasi (2008, 164).

⁷⁰ Orsi 1897b, 172–179; Sanahuja Yll/Vilar Vilà Bota 1976; Albanese Procelli, 2003, 48. Frasca (1981, 93) suggests that their inhabitants may have moved to Finocchito during its second phase, which is one of expansion.

⁷¹ For possible prehistoric examples on the steep slopes of Pantalica near the “anaktoron”, see Bernabò Brea 1990, 95.

⁷² Orsi 1892b.

⁷³ Albanese Procelli 2003, 133.

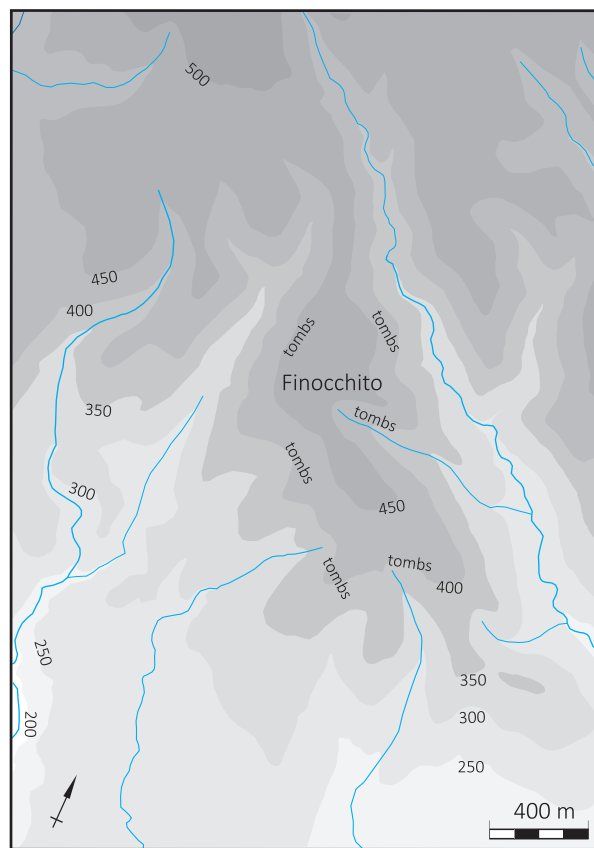
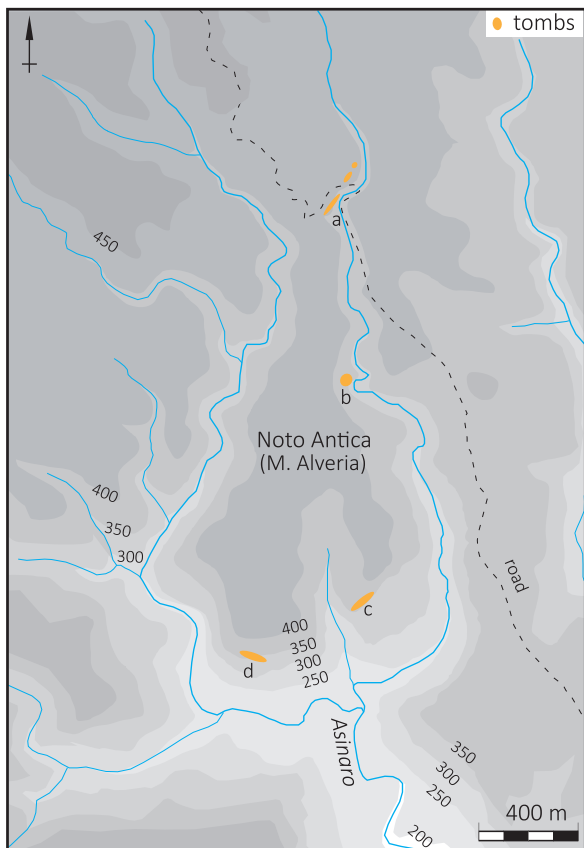
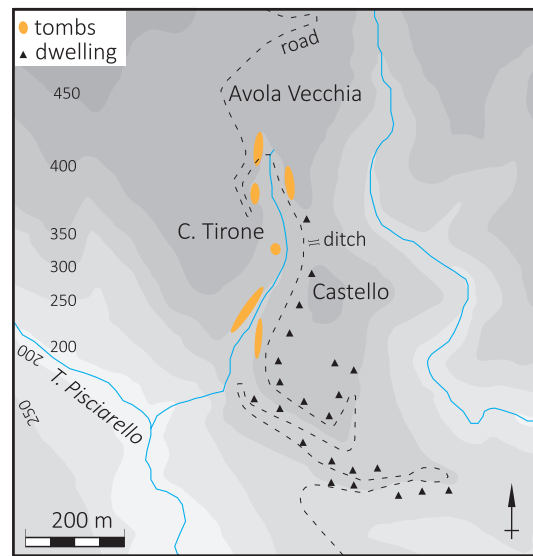
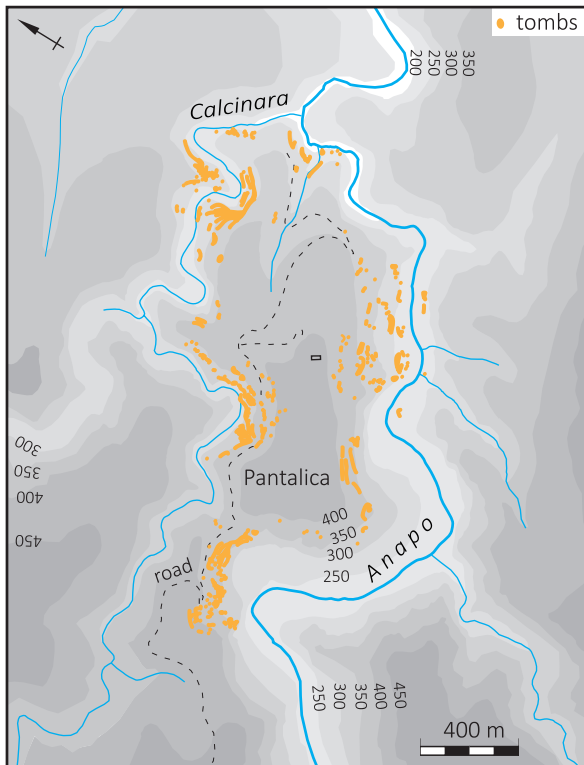


Fig. 17: Simplified topographical plans of Pantalica, Avola Vecchia, Noto Antica and Finocchito, showing main location of rock-cut tomb groups, relief (50-metre contours) and water courses

later third millennium BC. Likewise, evidence for both MBA and LBA/EIA phases of occupation at the same site or location is not uncommon, as seen at Lentini, Thapsos, Pantalica, Syracuse and Cozzo Pantano, for example, so that the old idea of a complete break in settlement location at the end of the MBA or an abandonment of coastal areas⁷⁴, is no longer so well supported.

The emergence of states

The changes to regional settlement patterns and native communities that came about as a result of the arrival of Greek settlers in southeast Sicily around the mid-8th century BC are beyond the scope of this article, although certain key points are noteworthy. Following Thucydides, who mentions the eviction of native residents from Syracuse by incoming Greeks, scholars have generally inferred that Syracusan territorial expansion was achieved mainly by aggressive or militaristic means at the expense of native communities⁷⁵. Nevertheless, the forms of interaction and coexistence between the various parties and polities, whose identities and interests must also have been changing rapidly at this time, seem to have varied considerably⁷⁶.

Between about 700 and 650 BC, the site of Helorus, which is a coastal promontory beside the Tellaro estuary (Fig. 1), probably came under Syracusan control⁷⁷. Although there might have been a short preceding phase of occupation by indigenous people in the late 8th century BC, the site was well placed to extend Syracusan strategic interests southward along the coastal zone, bypassing and perhaps isolating Cassibile, while acting as a nodal point in an evolving network of interaction with more southerly native communities. Due to the close proximity of Syracuse and the consequently enhanced, or inevitable, prospect of territorial rivalry and conflict, change likely occurred rapidly at Cassibile, leading to a loss of power and autonomy by about 700 BC. Although we have noted evidence of subsequent occupation, the site must

have assumed a relatively minor role within, or close to, the agricultural territory (chora) of Syracuse.

A further extension westward of Syracusan territorial control or hegemony in the mid-7th century BC is generally associated with settlements at Akrai and Kasmenai, close to the watersheds of the Anapo, Tellaro and Cassibile rivers, signalling more polarised territorial relations over a wider area, increasingly dominated by Syracuse, which had already outgrown all rivals in terms of physical and population size. By the end of the 7th century BC, the character and status of the former native sites within this area had changed markedly; a few of them, notably Finocchito, were abandoned, while others, such as Noto Antica, had a long subsequent history of urban development from at least the Hellenistic period. Pantalica obviously lost its former importance, but was probably not abandoned, and was certainly occupied in the Hellenistic and late antique periods. One of the explanations for the increasing dominance of Syracuse, which was probably an important site in the LBA-EIA settlement network, was its ability to reconfigure to its own advantage, rather than abolish, the old system of multiple local territorial centres. While state formation in this part of Sicily is only fully explicable with reference to Greek colonization, which included rivalries between different groups and polities, and wider contemporary trends in Mediterranean city-state formation, the study of settlement patterns and histories shows how it was also embedded in the local political and cultural landscape.

Conclusions

In this article I have investigated the role of rock-cut tombs in the creation and definition of Cassibile, which was one of the most prominent LBA-EIA centres in southern Sicily. While the tombs, and especially their contents, have been studied by others from the traditional standpoint of socio-economic reconstruction, cultural contacts and affiliations, here the focus has been on settlement organisation and size, demography, topography and long-term history. A landscape perspective, coupled with observations in the field, has highlighted the variable locations and associations of tombs, taken to reflect territorial concerns or claims, kinship links, and relationships with specific locales or features of the natural environment, such as water courses, valley entrances, viewpoints, route ways and some less accessible places unsuitable for residential use. The tomb-makers worked at times in harmony with nature, or in defiance of it, thereby emphasizing the im-

⁷⁴ Bernabò Brea 1957, 149; Leighton 2005, 278.

⁷⁵ E. g. Di Vita 1956 for an influential discussion, although it omitted Cassibile, which was not then regarded as a significant site in the 8th century BC.

⁷⁶ E.g. De Angelis 2003; La Torre 2011; Guzzo 2011, for the basics. Kistler *et al.* 2015 for recent approaches (with numerous further references).

⁷⁷ For contrasting views of its initial foundation, see Guzzo 2011, 206 (with references).

portance of certain parts of the site, notably Cugno Mola, which emerges as a commanding focal point or citadel. The ‘status’ of sites such as Cassibile, however, need not be viewed only in terms of traditional hierarchical models of strategic advantage, territorial control and political dominance, but also with reference to social identity and reproduction, time depth and memory, as exemplified by the durability and prominence of their rock-cut tombs, which could have contributed to their importance for a wider regional community.

Field observations have also illuminated the significance of other little known or unrecorded monuments and finds at the site, most notably rock-cut habitation chambers, whose distribution is largely complementary to that of the tombs. Although such monuments are often casually assigned to late antiquity or the Middle Ages, their date remains uncertain. The hypothesis of an earlier origin for them, at least in the classical if not the prehistoric period, as already suggested by this author for those at Pantalica, merits serious consideration and further investigation. Cassibile evidently had a long history of occupation and use after the LBA-EIA, about which little is known.

The concluding review of regional settlement patterns has drawn attention to a number of other LBA-EIA centres between the Anapo and Tellaro rivers, which have some features in common with Cassibile, such as their proximity to rivers or stream valleys and the placing of their chamber tombs around a prominent central hill or plateau. The territorial relations of these sites need to be more thoroughly evaluated, ideally following systematic survey work, although we can already detect some recurrent associations with particular landscape features and potential power relations within an evolving settlement hierarchy comprising major and minor centres. In the course of the 7th century BC, however, the old settlement system of multiple regional centres was reconfigured in favour of Syracuse, the most powerful of the Greek cities in eastern Sicily.

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